IN THE CLAIMS:

Please cancel non-elected claims 17-51 without prejudice or disclaimer.

Please amend the claims as follows:

B' 65. (Amended) The electrochemical test device of Claim 1 wherein the [non-conductive surface comprises a] flexible material comprises a polymeric sheet material [or a non-conductive coating affixed to one side of a flexible polymeric sheet material].

Please add the following new claims:

Sub C2 -- 52. An electrochemical testing device comprising:

a substrate of sufficient flexibility to undergo roll-type processing, the substrate layer comprising a flexible metallic material;

a non-conductive, surface morphology-improving coating affixed to a surface of the substrate layer; and

B2 an amorphous semiconductor material layer affixed to the non-conductive coating.

Sub D2 53. The electrochemical test device of claim 52, wherein the substrate has a thickness of 0.0005 - 0.005 inches.

54. The electrochemical test device of claim 53, wherein the metallic material comprises aluminum.

55. The electrochemical test device of claim 52, wherein the coating has a thickness less than about 0.005 inches.

56. The electrochemical test device of claim 55, wherein the coating comprises an epoxy coating.

57. The electrochemical test device of claim 52, wherein the semiconductor material comprises amorphous silicon oxide.

B2 cont.

58. The electrochemical test device of claim 57, wherein the amorphous silicon oxide is doped with an ion to increase conductivity.

59. The electrochemical test device of claim 52, wherein the semiconductor material layer has a thickness of 1 - 5 microns.

Sub C3

60. An electrochemical testing device comprising:

a substrate of sufficient flexibility to undergo roll-type processing, the substrate layer comprising an annealed, preshrunk polymeric material;

a surface morphology-improving coating affixed to a surface of the substrate layer; and

an amorphous semiconductor material affixed to the non-conductive coating.

sub D3

61. The electrochemical test device of claim 60, wherein the coating is a non-conductive coating.

62. The electrochemical test device of claim 60, wherein the polymeric material comprises one of a polyester, polycarbonate, and polyimide material.

63. The electrochemical test device of claim 60, wherein the coating has a thickness less than about 0.005 inches.

β2 cont.

64. The electrochemical test device of claim 60, wherein the semiconductor material comprises amorphous silicon oxide.

65. The electrochemical test device of claim 64, wherein the amorphous silicon oxide is doped with an ion to increase conductivity.

66. The electrochemical test device of claim 60, wherein the semiconductor material layer has a thickness of 1 - 5 microns. --